

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,563,774 B2
APPLICATION NO. : 09/900364
DATED : July 21, 2009
INVENTOR(S) : Paul D. van Poelje, Mark D. Erion and Toshihiko Fujiwara

Page 1 of 8

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6.

Lines 60-61, “-oxyalkyleneamino-” should read --oxyalkyleneamino- --.

Column 7.

Line 5, “include norbomyl” should read --include norbornyl--.

Column 10.

Line 55, “Khamnei” should read --Khamnei--.

Column 26.

Line 7, “all except H” should read --all except —H--.

Line 26, “OR³ and” should read -- —OR³ and--.

Line 63, “R¹⁶ is -(CR¹²R¹³)_nC(O)-R¹⁴” should read --R¹⁶ is -(CR¹²R¹³)_n-C(O)-R¹⁴--.

Column 27.

Line 60, “OR³ and” should read -- —OR³ and--.

Column 36.

Line 50, “amnidine” should read --amidine--.

Line 52, “C₂-C₅ alkeniyl” should read --C₂-C₅ alkenyl--.

Column 37.

Line 10, “the R attached” should read --the R¹ attached--.

Column 43.

Line 19, “prodrugs and salts” should read --salts or prodrugs--.

Column 46.

Line 15, “form a bidendate” should read --form a bidentate--.

Column 49.

Line 33, “A, E, and L are independently” should read --A, E, and L are selected--.

Column 51.

Line 27, “bidendate” should read --bidentate--.

Line 64, “C1-C5 alkyl or” should read --C₁-C₅ alkyl, or--.

Column 54.

Line 30, “-alkylthio-alkyl-, -alkyl-thio-,” should read -- -alkylthioalkyl-, -alkylthio-,--.

Column 58,

Line 15, “are not $-NR^6$,” should read --are not $-NR^6$ --.

Column 59,

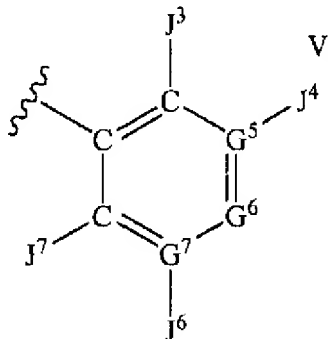
Line 20, “Y is $-NR^6$,” should read --Y is $-NR^6$ --.

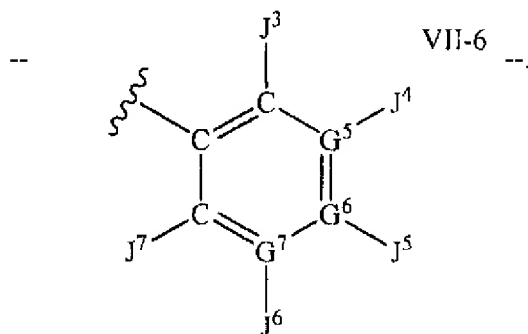
Column 62,

Line 41, “from $-H$, or together” should read --from $-H$, alkyl, or together--.

Line 42, “ R^4 from a” should read -- R^4 form a--.

Column 64,

Lines 20-26, “ VII-6” should read



Line 42, “alkenyl, alkylenearyl” should read --alkenyl, alkynyl, alkylenearyl--.

Column 66,

Line 22, “R” is” should read -- R^{11} is--.

Column 68,

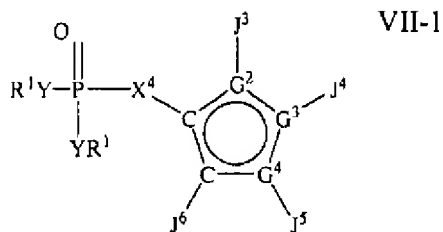
Line 48, “ $-OCOR^3$, $-OCOR^3$ ” should read -- $-OCOR^3$, $-OCO_2R^3$ --.

Column 69,

Line 51, “together with R^6 ” should read --together with R^{16} --.

Column 70,

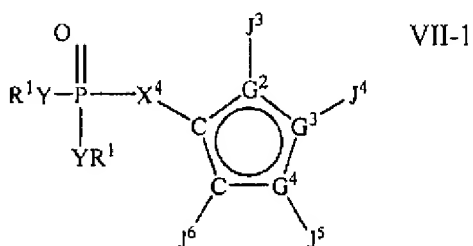
Line 40, “thereof.



” should read

--thereof.

In one aspect of the present invention compounds of formula VII-1 are envisioned.



--.

Line 51, “In one aspect” should read --In another aspect--.

Line 67, “formula VII-1” should read --formula VII-1-A--.

Column 72,

Line 11, “—OC₂R³” should read -- —OCO₂R³--.

Column 73,

Line 23, “CHR²OC(S)OR³” should read -- —CHR²OC(S)OR³--.

Line 27, “SCO₂R³” should read -- —SCO₂R³--.

Lines 45-46, “—CH(aryl)OH, 13 CH(CH=CR₂)OH” should read

-- —CH(aryl)OH, —CH(CH=CR₂)OH--.

Line 56, “and 13 OC(O)SR³” should read --and —OC(O)SR³--.

Column 74,

Lines 65-66, “13 CHR²OC(O)SR³” should read -- —CHR²OC(O)SR³--.

Column 75,

Line 25, “—CHR₂NHaryl” should read -- —CH₂NHaryl--.

Lines 33-34, “13 OC₂R³” should read -- —OC₂R³--.

Line 65, “—C(R⁴)₂C(O)³, or” should read -- —C(R⁴)₂C(O)OR³, or--.

Column 76,

Lines 20-21, “aspect are compounds are such” should read

--aspect are compounds such--.

Column 85.

Lines 63-64, “7 one Y is $-\text{NR}^6-$, and the other YR^1 is $\text{NR}^{15}\text{R}^{16}$, and R^{15} is not H” should read --7 one Y is $-\text{NR}^6-$, and the other YR^1 is $-\text{NR}^{15}\text{R}^{16}$, and R^{15} is not H--.

Lines 65-66, “8 one Y is $-\text{NR}^6-$, and the other YR^1 is $\text{NR}^{15}\text{R}^{16}$,” should read --8 one Y is $-\text{NR}^6-$, and the other YR^1 is $-\text{NR}^{15}\text{R}^{16}$ --.

Column 86.

Lines 14-16, “10 one Y is $-\text{NR}^6-$, and the other YR^1 is $\text{NR}^{15}\text{R}^{16}$, and R^{16} is, where $-\text{NR}^{15}\text{R}^{16}$ is a cyclic amine” should read

--10 one Y is $-\text{NR}^6-$, and the other YR^1 is $-\text{NR}^{15}\text{R}^{16}$, and R^{16} is, where $-\text{NR}^{15}\text{R}^{16}$ is a cyclic amine--.

Lines 17-19, “11 one Y is $-\text{NR}^6-$, and the other YR^1 is $\text{NR}^{15}\text{R}^{16}$, where $-\text{NR}^{15}\text{R}^{16}$ is a selected from a group of morpholinyl and pyrrolidinyl” should read

--11 one Y is $-\text{NR}^6-$, and the other YR^1 is $-\text{NR}^{15}\text{R}^{16}$, where $-\text{NR}^{15}\text{R}^{16}$ is selected from a group of morpholinyl and pyrrolidinyl--.

Lines 19-20, “12 one Y is $-\text{NR}^6-$, and the other YR^1 is $\text{NR}^{15}\text{R}^{16}$, where $-\text{NR}^{15}\text{R}^{16}$ is a $-(\text{CR}^{12}\text{R}^{13})_n-\text{C}(\text{O})\text{R}^{14}$ ” should read

--12 one Y is $-\text{NR}^6-$, and the other YR^1 is $-\text{NR}^{15}\text{R}^{16}$, where $-\text{NR}^{15}\text{R}^{16}$ is a $-(\text{CR}^{12}\text{R}^{13})_n-\text{C}(\text{O})\text{R}^{14}$ --.

Line 44, “ OCOR^3 ,” should read -- $-\text{OCOR}^3$ --.

Column 87.

Line 15, “ $-\text{OR}^2$, R^2 ” should read -- $-\text{OR}^2$, $-\text{R}^2$ --.

Column 96.

Lines 53-54, “groups are O—” should read --groups are $-\text{O}-$ --.

Column 101.

Line 61, “Bis-[4-(1-triazolophenyl) esters;” should read --Bis-[4-(1-triazolophenyl)] esters;--.

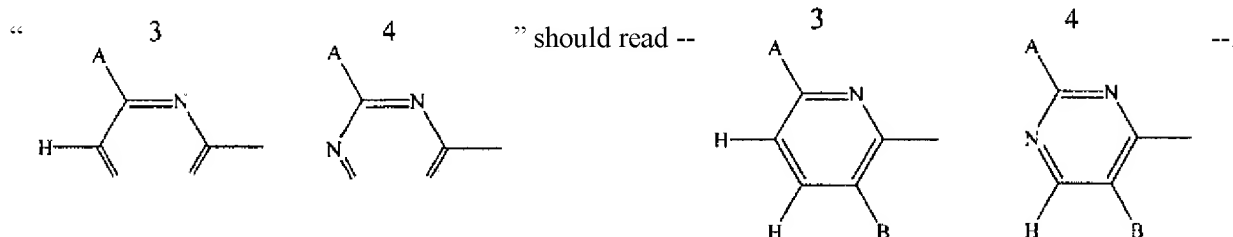
Column 104.

Line 4, “Bis-(phenyloxycarbonyloxymethyl) esters;” should read --Bis-(phenyloxycarbonyloxymethyl) esters;--.

Column 105.

Line 9, “of formula” should read --of formula I-A.--.

Lines 66-67, Group 2 structures,



Column 106.

Line 36, “5. —NH—CH(CH(CH₃)₂))—C(O)R¹⁴” should read
--5. —NH—CH(CH(CH₃)₂))—C(O)R¹⁴--.

Line 37, “6. —NH—CH(CH₂(CH(CH₃)₂)))—C(O)R¹⁴” should read
--6. —NH—CH(CH₂(CH(CH₃)₂)))—C(O)R¹⁴--.

Column 107.

Line 1, “4. —NH—CH(CH₂CONH₂)—C(O)R¹⁴” should read
--4. —NH—CH(CH₂CONH₂)—C(O)R¹⁴--.

Column 108.

Line 55, “4. —N—C(CH₃)₂CH₂—C(O)R¹⁴” should read
--4. —NH—C(CH₃)₂CH₂—C(O)R¹⁴--.

Line 56, “5. —N—CH(CH(CH₃)₂))—C(O)R¹⁴” should read
--5. —N—CH(CH(CH₃)₂))—C(O)R¹⁴--.

Line 57, “6. —NH—CH(CH₂(CH(CH₃)₂)))—C(O)R¹⁴” should read
--6. —NH—CH(CH₂(CH(CH₃)₂)))—C(O)R¹⁴--.

Column 149.

Lines 33-34, “early stages diabetes” should read --early stage diabetes--.

Column 150.

Line 15, “Insulin/Insulin Analozues” should read --Insulin/Insulin Analogues--.

Column 152.

Line 60, “Wiemsperger” should read --Wiernsperger--.

Column 158.

Line 56, “CP-9971 1” should read --CP-99711--.

Column 160.

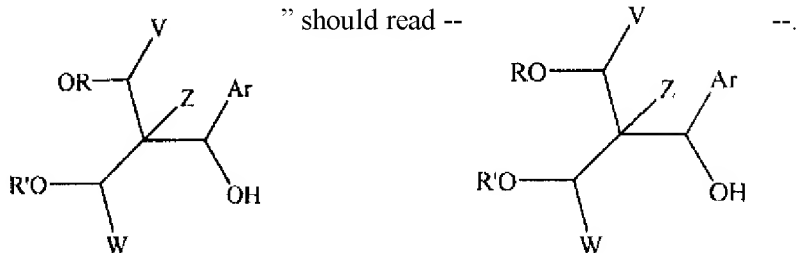
Line 46, “Foley T E” should read --Foley J E--.

Column 170.

Line 32, “oxidation of one the” should read --oxidation of one of the--.

Columns 171-172.

Bottom center figure, “ ” should read --



Column 174.

Line 33, "alkylarninocarbonyl" should read --alkylaminocarbonyl--.

Column 177.

Line 32, "(Dom et al," should read --(Dorn et al,--.

Column 179.

Line 63, "synthesis of f tiran" should read --synthesis of furan--.

Column 181.

Line 34, "wherein G=S" should read --wherein G=S--.

Column 182.

Line 3, "can made in" should read --can be made in--.

Line 36, "reactions in presence of" should read --reactions in the presence of--.

Column 186.

Lines 9-10, "are each optionally is a carboxamido" should read
--are each optionally a carboxamido--.

Lines 21-22, "are each optionally is an" should read --are each optionally an--.

Column 192.

Lines 17-18, "(1.1 n unole)" should read --(1.1 mmole)--.

Column 194.

Line 36, "N: 5.5" should read --N: 5.53--.

Column 195.

Lines 34-35, "(3.27) 2-Amino-5-cyclopropyl-4-[2-(5-phosphono)fi aranyl]thiazole." should read
--(3.27) 2-Amino-5-cyclopropyl-4-[2-(5-phosphono)furanyl]thiazole.--.

Line 60, "(3.33) ²-Amino-" should read --(3.33) 2-Amino- --.

Column 196.

Line 1, "(3.35) ²-Amino-" should read --(3.35) 2-Amino- --.

Line 5, "(3.36) ²-Amino-" should read --(3.36) 2-Amino- --.

Line 20, "(3.40) ²-Amino-" should read --(3.40) 2-Amino- --.

Line 27, "(3.42) ²-Methyl-" should read --(3.42) 2-Methyl- --.

Line 28, "C_{11H12}NO₄PS+0.3" should read --C₁₁H₁₂NO₄PS+0.3--.

Column 197.

Line 48, "(3.67) ²-Amino-" should read --(3.67) 2-Amino- --.

Column 199.

Line 50, "(3 m mole)" should read --(3 mmole)--.

Column 200.

Line 6, "N: 10.21." should read --N: 11.18.--.

Lines 45-46, "(6.2) 2-Methyl-5-isopropyl-4-[2-(5-phosphorodiamido)f tiranyl]thiazole" should read
--(6.2)2-Methyl-5-isopropyl-4-[2-(5-phosphorodiamido)furanyl]thiazole--.

Column 201.

Lines 47-49, "2-amino-5-isobutyl-4-{2-[5-(O-phenyl-N-(1 methoxycarbonyl)ethyl)
phosphona mnido]- furanyl}thiazole" should read
--2-amino-5-isobutyl-4-{2-[5-(O-phenyl-N-(1 methoxycarbonyl)ethyl)
phosphonamido]-furanyl}thiazole--.

Column 203.

Line 24, " $C_{21}H_{24}N_3O_5PS+0.2$ " should read -- $C_{21}H_{24}N_3O_5PS+0.2$ --.

Lines 35-37, "(6.35) 2-amino-5-isobutyl-4-{2-[5-(4,5-benzo-1-oxo-1-phospha-2-oxa-6-6-
aza)cyclo-hexan-1-yl]fi aranyl}thiazole." should read
--(6.35) 2-amino-5-isobutyl-4-{2-[5-(4,5-benzo-1-oxo-1-phospha-2-oxa-6-6-
aza)cyclo-hexan-1-yl]furanyl}thiazole.--.

Line 50, "A solution of $AlCl_3$ " should read --A solution of $AlCl_3$ --.

Column 204.

Line 1, "with CH_2C_{12} " should read --with CH_2Cl_2 --.

Column 207.

Lines 24-25, "C: 52.26; 7.06; 10.60. Found: C: 52.21; 6.93; 10.62." should read
--C: 52.26; H: 7.06; N: 10.60. Found: C: 52.21; H: 6.93; N: 10.62.--.

Line 32, " $C_{35}H_{45}N_4O_6PS+0.5$ " should read -- $C_{35}H_{45}N_4O_6PS+0.5$ --.

Line 47, "P S3: C:" should read --P S₃: C:--.

Line 56, "H: 6.97; H: 7.90. Found: C: 62.85; h 7.06, 7.81." should read
--H: 6.97; N: 7.90. Found: C: 62.85; H: 7.06, N: 7.81.--.

Column 208.

Lines 2-3, "H: 8.42. Found: C: 59.88; H: 6.28; H: 8.32." should read
--N: 8.42. Found: C: 59.88; H: 6.28; N: 8.32.--.

Line 8, "H: 8.98." should read --N: 8.98.--.

Line 39, "bis-phosphoroarnidate" should read --bis-phosphoroamidate--.

Column 209.

Line 35, " N_3 -methyl-2-iodobenzene-1-sulfonamide" should read
-- N^1 -methyl-2-iodobenzene-1-sulfonamide--.

Lines 40-42, " N^1 -(4-5 chlorobenzyl)-2-iodobenzamide (for 13.14);
N1-(4-chlorophenethyl)-2-iodobenzamide (for 13.15); N1-benzyl-2-iodobenzene-1-sulfonamide"
should read
-- N^1 -(4-chlorobenzyl)-2-iodobenzamide (for 13.14);
 N^1 -(4-chlorophenethyl)-2-iodobenzamide (for 13.15); N^1 -benzyl-2-iodobenzene-1-sulfonamide--.

Column 209.

Line 51, "N¹-(2,4-difluorophenyl)-2-iodobenzamide" should read

--N¹-(2,4-difluorophenyl)-2-iodobenzamide--.

Line 55, "(for 15 13.31);" should read --(for 13.31);--.

Lines 63-64, "N¹-(4-iodophenyl)-2-tetrahydro-1H-pyrrol-1-ylacetamide" should read

--N¹-(4-iodophenyl)-2-tetrahydro-1H-pyrrol-1-ylacetamide--.

Column 210.

Line 28, "(1m mol)" should read --(1 mmol)--.

Column 213.

Line 42, "2 MM" should read --2 mM--.

Column 214.

Line 47, "Vervoom" should read --Vervoorn--.

Column 216.

Line 28, "5-bromo-1-μD-ribofuranosyl-imidazole-carboxamide" should read

--5-bromo-1-βD-ribofuranosyl-imidazole-carboxamide--.

Column 220.

Line 49, "though" should read --through--.

Column 224.

Line 25, "4 treatments groups" should read --4 treatment groups--.

Column 244.

Line 50, "R¹ is" should read --R¹ is--.

Line 53, "B" is a C¹-C⁶ alkyl" should read --B" is a C₁-C₆ alkyl--.

Lines 60-61, "a C₁-C₆ alkyl or C(O)R¹¹, wherein R¹¹ is alkyl; and YR¹ is OH." should read

--a C₁-C₆ alkyl or C(O)R¹¹, wherein R¹¹ is alkyl; and YR¹ is OH.--.

Lines 63-64, "C₁-C₆ alkyl or C(O)R¹¹, wherein R¹¹ is alkyl; Y is NR⁶ and R⁶ is H; and R¹ is" should read

--C₁-C₆ alkyl or C(O)R¹¹, wherein R¹¹ is alkyl; Y is NR⁶ and R⁶ is H; and R¹ is--.

Column 245.

Line 2, "and R¹ is" should read --and R¹ is--.

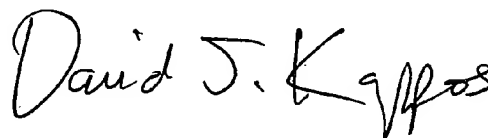
Line 7, "B" is a C₁-C₆" should read --B" is a C₁-C₆--.

Line 14, "is a C₁-C₆" should read --is a C₁-C₆--.

Lines 16-17, "and R¹ is" should read --and R¹ is--.

Signed and Sealed this

Twenty-sixth Day of January, 2010



David J. Kappos
Director of the United States Patent and Trademark Office